

Work Order ID 151936

Friday, October 14, 2016 1:55:39 PM

151936

Page 1

Item ID: D3609-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Doubler

Stop ***NS2***

Start Date: 10/11/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/14/2016 Req'd Qty: 4.00

4

Customer:

Reference:

DAS

Approvals: Process Plan: 21 Date: OCT 17 2016

9-89

Tooling:

Date:

Run Start ***NR1***

QC: Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3609	D								

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.08

FLOW CNC Waterjet

1-Cut as per Dwg D3609

Dwg Rev: DProg Rev: D*****NO SCRATCH ON TOP SURFACE*****

2-Deburr if necessary

(4)
(4)Dec 16/11/19
Dec 16/11/29

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.01

Quality Control

(4)
(4)Dec 16/11/19
Dec 16/11/29

DQA: 2/1 Date: 2017-04-05QA Closed: BM Date: MAR 24 2017

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: <u>151936</u>		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. <u>D3609-1</u>		Rework ☒		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. <u>17-6350</u>		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date: <u>16-11-29</u>		Step #: <u>100</u>		QTY Effective: <u>4</u>			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition			<u>DAS</u> <u>9</u> <u>9-89</u> <u>16-11-29</u>		
<u>part cut on wrong side</u> <u>E.C. instruction not clear on what side to cut.</u>				<u>scrap destroy</u> <u>replace M304 522 GA4P</u> <u>136036</u> <u>New FAI needed.</u> <u>inter instruction on w/o was modied.</u> <u>inform operator on proper position of material before cutting it.</u>			Completed By <u>DL</u> <u>16/12/22</u> Lead hand / Supervisor Approval Verification <u>DAS</u> <u>9</u> <u>9-89</u> <u>1702-06</u>		
							QC / QA Coordinator Approval <u>DAS</u> <u>9</u> <u>9-89</u> <u>16-11-29</u>		
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☒	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	☒ Instructions Incomplete <u>Unclear</u>	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.01				4			DAS 30 9-89
Quality Control									DEC 14 2016
121	Form as per dwg	0.00							
121					DAS 30 9-89				
Brake NC	Memo	0.06				4			DEC 20 2016
Brake NC	USE DT9760 TOOL								
122		0.00							
122									
Small Fab	Memo	0.00				8	FF		DEC 20 2016
Small Fab	1- TRIM AS PER DWG USING GUIDE LINES 2- BUFF SCRATCHS WITH LINE MATE (RED SCOTCH BRIGHT) TOP SURFACE ONLY								

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
123	QC5- Inspect part completeness to step on W/O	0.00							
123									
QC	Memo	0.01				(B) 1612-22			DAS 9 9-89
Quality Control									
130	Identify as per dwg & Stock Location: <i>ST222A</i>	0.00							
130									
Packaging	Memo	0.01				<i>Sx</i>	JAN 04 2017		DAS 26 9-89
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.07				<i>4 parts makes 8 x D3609-1</i>			DAS 21 9-89
Quality Control								JAN 09 2017	

DAS
21
9-89 JAN 04 2017

Picklist Print

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Page 1

Work Order ID: 151936

151936

Parent Item: D3609-1

D3609-1

Parent Item Name: Doubler

Start Date: 10/11/2016

Required Date: 10/14/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07-03-26 JLM
IPP Rev:B 08-12-11 as per ECN08-577 DD verified by:EC IPP REV:C
AS PER REV C JLM 11-05-04 VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S22GA4P

Purchased

No

sf

15.0000

4.95579

M304S22GA4P

304/316 Sheet .032

see 11/11/19

Location

Loc Qty

Loc Code

MAT020 136036

15

m126571

15

10 see 11/11/29

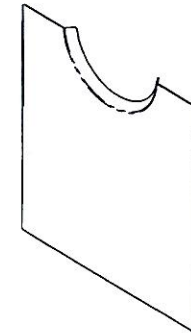
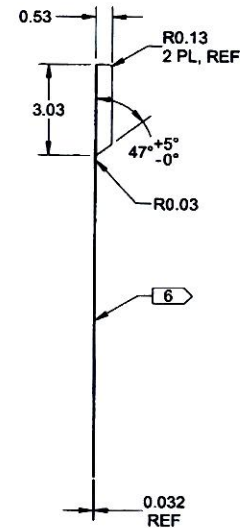
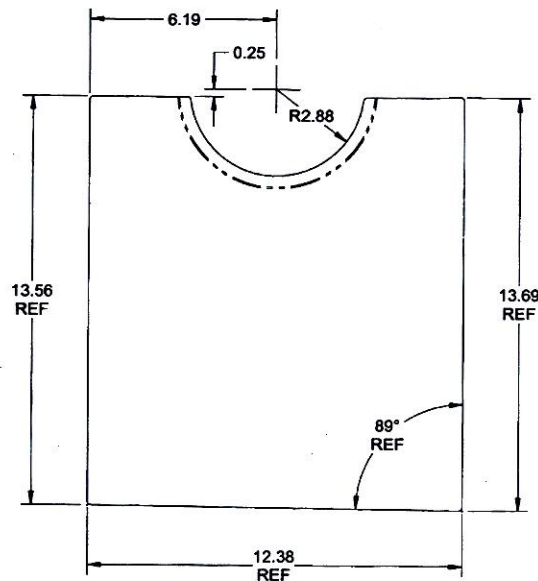
M304S20GA4P → 131653

4.96

NOV 25 2016

DAS
13
9-89

acceptable
see attach NCR.



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 151936 MJS
16-10-17

RELEASED
2011-10-04
JW

D3609-1 DOUBLER

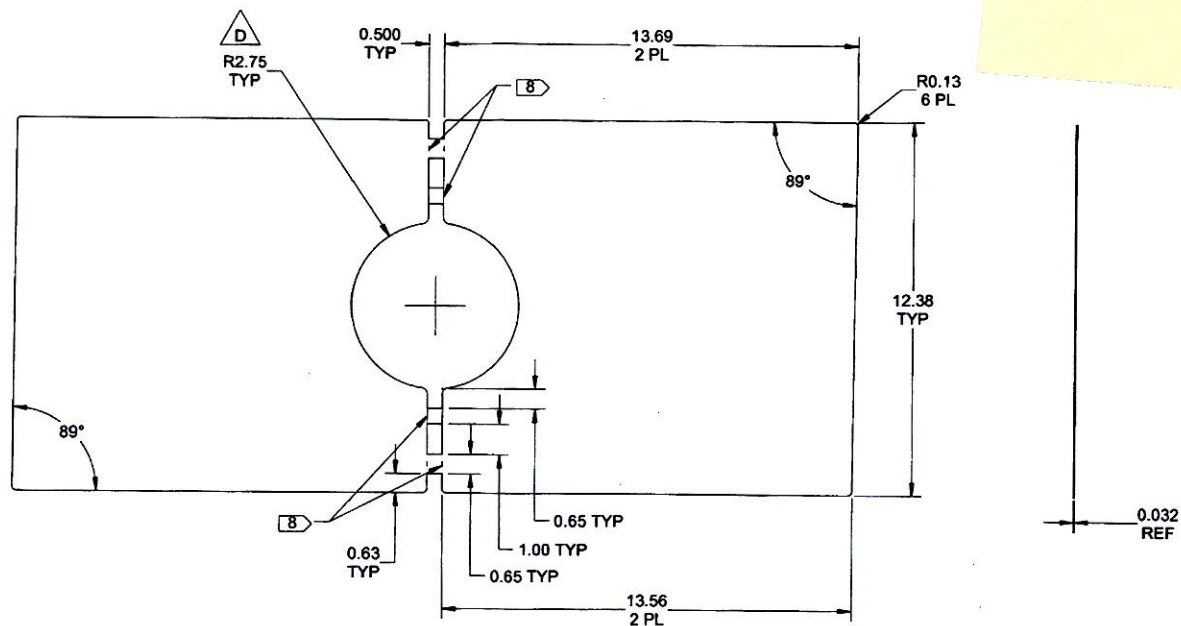
NOTES:

- 1) MATERIAL: MAKE FROM D3609-1F FLAT PATTERN
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.46 lbs
- 8) FORM USING DT9763 AND TRIM PER PHANTOM LINE ON SHEET 2

D	REVISE FLAT PATTERN SYMMETRY; R2.75 WAS R2.83 (ZN C8-2)	RF	11.09.20
C	2.88 WAS 2.98 (ZN C5-1); 3.03 WAS 3.20 (ZN C4-1); 0.53 WAS 0.50 (ZN D4-1); ADD ANGLE TOLERANCE (ZNC3-1); REVISE D3609-1F	RF	11.06.07
B	ADD BEVEL (ZN C3-1); ADD FLAT PATTERN (ZN B4-2)	RF	11.04.28
A	NEW ISSUE	MB	07.04.11
REV.	DESCRIPTION	BY	DATE
DESIGN	J		
DRAWN	RF		
CHECKED	J		
MFG. APPR.	J		
APPROVED	J		
DE APPR.	J		
DATE	11.09.20		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3609	REV. D
TITLE DOUBLER	SCALE NTS
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PAL to change
Drawing to Match
BOM.



RELEASED
2011-10-04

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 22 GAUGE
PER MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM 240
OR ASME SA240
PER DART SPEC M304S22GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.93 lbs
- 8) FORM USING DT9763 AND TRIM PER PHANTOM LINE

D3609-1F FLAT PATTERN
(MAKES 2 PARTS)



DESIGN	J	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	J	DRAWING NO.	REV. D
MFG. APPR.	J	D3609	SHEET 2 OF 2
APPROVED	J	TITLE	SCALE
DE APPR.	J	DOUBLER	NTS
DATE	11.09.20	COPYRIGHT © 2007 BY DART AEROSPACE LTD	
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